

U.S. Department of the Interior  
Bureau of Land Management  
White River Field Office  
73544 Hwy 64  
Meeker, CO 81641

## ENVIRONMENTAL ASSESSMENT

**NUMBER:** CO-110-2005-099-EA

**CASEFILE/PROJECT NUMBER** (optional): COD 032703B, COD 033586, COD 052538,  
COD 032675

**PROJECT NAME:** 11 APD's

**LEGAL DESCRIPTION:** T. 2N, R. 103W, sec. 12, 13, 15, 23, 24  
T. 2N, R. 102W, sec. 18

**APPLICANT:** Chevron Production Co.

**ISSUES AND CONCERNS** (optional): None

### **DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

***Background/Introduction:*** Onsite was conducted on 21 March 2005.

**Proposed Action:** Applicant is proposing to drill 11 new oil wells in the Rangely Weber Sand Unit. The table below shows the proposed disturbance for each well and associated access and pipelines. Work is anticipated to begin July 15, 2005.

Well Name	New Access road	Location Size	Pipeline Disturbance	Acres (Total)
Gray B 25X	728' X 30'	390' X 355'	2975' X 40'	6.41
Gray B 26X	528' X 30'	330' X 390'	2616' X 40'	5.71
Gray B 27X	528' X 30'	330' X 390'	3074' X 40'	6.13
AC McLaughlin 83X	250' X 30'	300' X 390'	340' X 40'	3.17
AC McLaughlin 84X	100' X 30'	310' X 380'	2759' X 40'	5.30
AC McLaughlin 85X	Existing	310' X 390'	3455' X 40'	5.95
AC McLaughlin 86X	Existing	325' X 375'	2322' X 40'	4.93
AC McLaughlin 87X	100' X 30'	310' X 390'	3802' X 40'	6.34
SB Lacy 13Y	Existing	330' X 390'	1811' X 40'	4.61
LN Hagood A 18X	100' X 30'	335' X 355'	2169' X 40'	4.80
McLaughlin Unit B-2X (Pvt Surf)	528' X 30'	325' X 390'	2556' X 40'	5.63
Total Project Acres				58.98

Well Name	New Access road	Location Size	Pipeline Disturbance	Acres (Total)
Total BLM Acres				53.35

Total disturbance for the project will be 58.98 acres (BLM disturbed surface will be 53.35 acres). Existing roads, the well locations and proposed flowline routes are shown on Map attached.

Ancillary facilities are not planned for now or in the near future. Fences are not present on the property; therefore installing gates, cattle guards, or cutting fences will not be required. Water used for drilling the wells will be from an existing injection line on location. Fuel gas for drilling will be by a temporary surface pipeline from the existing residue gas fuel line.

Reserve pits will be constructed approximately 8' deep and at least one half of this depth shall be below the surface of the existing ground. The reserve pits will be used as a storage area during the drilling of this well to store non-flammable materials such as cuttings, salts, drilling fluids, chemicals, produced fluids, etc. The pits will be fenced with 32" to 48" high woven wire to protect wildlife and domestic animals. After the completion rig finishes, cuttings and drilling fluids will be buried in the reserve pit and the surface contoured to conform to surrounding terrain. If it becomes necessary to keep the pit, it will remain fenced with woven wire until covered. Overhead flagging will be installed over pits should oil accumulate or be discharged. Trash will be confined in a covered container and hauled to an approved landfill. A portable toilet will be supplied for human waste.

The White River Field Manager will be notified at least 24 hours prior to commencing reclamation work. At that time, when all drilling and production activities have been completed, the location site will be reshaped to the original contour. Distribute topsoil, disk and seed all disturbed areas outside the work area according to the seed mixture chart. Any drainage re-routed during the construction activities shall be restored to their original line of flow as near as possible. Prior to burial of cutting and mud, any liquid oil or water will be trucked to the recovery plant. The disturbed areas not needed for well operation and access roads will be revegetated and rehabilitated per the remainder of the season. All disturbed surfaces will be seeded with the following seed mixture:

Crested Wheatgrass (Nordan)	3 Lbs. PLS/acre
Siberian Wheatgrass (P27)	4 Lbs. PLS/acre
Russian Wildrye (Vinall)	2 Lbs. PLS/acre

The seedbed will be prepared by disking following the natural contour. Drill seed on contour at a depth no greater than ½ inch. In areas that cannot be drilled, broadcast at double the seeding rate and harrow seed into the soil. Certified seed will be used. Fall seeding must be completed after September 1, and prior to prolonged ground frost. Perennial vegetation must be established.

During operations, if discoveries of any cultural remains, monuments or sites, or any object of antiquity subject to the Antiquity's Act of June, 1906 (34Stat. 225; 16 U.S.C. Secs. 431-433), the Archeological Resources Protection Act of 1979 (PL 96-95), and 43 CFR, Part 3, operations will immediately cease and will be reported directly to the Field Manager. In cases where the project

proponent does not wish to relocate the proposed action and mitigative data recovery is necessary, the cost of such mitigation shall be borne by the operator, unless otherwise agreed upon in writing.

Approval shall be requested to continue operations should the surface become saturated to a depth of three (3) inches. Turnouts will not be required. The well cellar will be covered with steel grating and no hazards will exist for livestock or wildlife. All permanent facilities placed on the location will be painted Carlsbad Canyon Brown (Fuller Brand Colorant 31293 or equivalent) to blend with the natural environment.

For final reclamation, when any of the wells are abandoned, the locations will be restored to the original contours. During reclamation of the site, fill material will be pushed into the cuts and up over the back slope. Depressions will not be left that will trap water or form ponds. Topsoil will be distributed evenly over the location, and seeded according to the seed mixture chart. The access road and location will be disked prior to seeding. Perennial vegetation must be established.

**No Action Alternative:** In the no-action alternative the wells, access roads and flowlines would not be permitted; therefore there would not be any new disturbance.

**ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:** None

**NEED FOR THE ACTION:** To respond to the request by applicant to exercise lease rights and develop hydrocarbon reserves

**PLAN CONFORMANCE REVIEW:** The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-49 thru 2-52

Decision Language: "To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values."

**AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:**

**STANDARDS FOR PUBLIC LAND HEALTH:** In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

## **CRITICAL ELEMENTS**

### **AIR QUALITY**

*Affected Environment:* The Coal Oil Basin near Rangely, CO is not located near any special designation air sheds or non-attainment areas. The proposed action will have little affect on air quality in the area with exception to dry periods when human disturbance increased fugitive dust levels.

*Environmental Consequences of the Proposed Action:* Removal of the limited ground cover will leave soils vulnerable to eolian processes until mitigation is complete. Elevated levels of fugitive dust would result with strong winds and increased human activity during dry periods. However, airborne particulate matter should not exceed Colorado air quality standards on an hourly or daily basis.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* During dry periods/heavy use times dust abatement practices such as spreading water on roadways will be necessary.

### **CULTURAL RESOURCES**

*Affected Environment:* The eleven wells listed in the proposed action as well as the associated access roads and flowlines, are located in the Rangely Field which has been inventoried (Larralde 1981, Compliance Dated 2/18/1981) and is covered by an agreement with the Colorado SHPO. No cultural resources are known in the project area.

*Environmental Consequences of the Proposed Action:* The proposed well pads and well tie pipelines will not impact any known cultural resources.

*Environmental Consequences of the No Action Alternative:* There would be no new impacts to cultural resources under the No Action Alternative.

*Mitigation:* for all wells and well tie pipelines: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for

knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places
- The mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- A timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

## **INVASIVE, NON-NATIVE SPECIES**

*Affected Environment:* The proposed action is located within Alkaline Slope and Clayey Saltdesert ecological sites, which are dominated by salt tolerant vegetation. The dominate plant community for these sites consist of greasewood, and various saltbushes such as shadscale, Gardner saltbush, mat saltbush, and fourwing saltbush. The understory of these shrubs is dominated by western wheatgrass, Colorado Wildrye, and squirreltail. Cheatgrass and halogeton are undesirable, invasive, and alien plant species that are present within the locality of the proposed action. Both of these species are highly adapted to disturbed soils.

The soils within the project area are principally a Billings Silty Clay Loam (Alkaline Slope ecological site) and Chipeta Silty Clay Loam (Clayey Saltdesert ecological site). These soil types have a high clay content that is moderate to highly erosive and receives low precipitation with rapid runoff, thus limiting forage production and hampering re-vegetation efforts.

Drought conditions are very prevalent within the Coal Oil Basin area, which has hampered the successful establishment of reclaimed plant species of other projects in this area. Therefore, undesirable and invasive annual plant species (i.e. halogeton, cheatgrass) have become prevalent

in portions of previously disturbed areas which provide little resource value and hinder efforts to meet Public Land Health Standards.

*Environmental Consequences of the Proposed Action:* Weed species found in the area are effectively controlled by establishment of seeded species within disturbed areas. The proposed seed mix, which includes non-native species, is recommended because its associated plant species are highly adapted to this site (heavy clay soils) and offer the greatest opportunity to establish vegetation cover that will result in soil stabilization; thereby, providing a competitive interaction between seeded species and noxious and/or invasive weed species.

There is always the opportunity for other noxious weed species to be transported onto the proposed action locations by construction and/or support equipment.

Prompt reclamation with successful establishment would prevent cheatgrass and halogeton from establishing on disturbed sites. If other noxious weeds were to invade the site, prompt control would prevent movement to the adjacent plant communities.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* The applicant will be responsible for eradicating cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the proposed action. The applicant will use materials and methods as outlined in the RMP and/or authorized in advance by the White River Field Office Manager. Application of herbicides must be under field supervision of an EPA certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

## **MIGRATORY BIRDS**

*Affected Environment:* The project area is encompassed by arid salt desert shrublands consisting principally of shadscale, matt and Gardner saltbush, rabbitbrush, snakeweed and big sagebrush. Herbaceous groundcover is comprised mainly of native grasses. These salt desert communities typically support several migratory bird species which fulfill nesting functions between late-May through mid-July including vesper and sage sparrow, western meadowlark, sage thrasher and horned lark.

Although the project area and areas adjacent to the project area have no open water or wetland areas to support or attract waterfowl, the development of reserve pits that contain drilling fluids may attract waterfowl for purposes of resting and/or foraging, at least during migration (i.e., local records: mid-March through late May; mid-October through late November).

*Environmental Consequences of the Proposed Action:* With the exception of sites AC McLaughlin 84X, 85X, 86X and 87X, and flowlines associated with AC McLaughlin 83X, 85X, 86X and Gray B25X, 26X, all construction activities will take place after the nesting season. Those sites mentioned above are located along existing roads, an area that typically assumes

little nesting activity. Any involvement with suitable nest habitat would be minor, as these community types comprise about 10,000 acres in Rangely Oil Field.

It has recently been brought to BLM's attention that in certain situations migratory waterfowl (i.e., teal and gadwall) have contacted oil-based drilling fluids stored in reserve pits during or after completion operations and are suffering mortality in violation of the Migratory Bird Treaty Act. The extent and nature of the problem is not well defined, but is being actively investigated by the federal agencies and the companies. Until the vectors of mortality are better understood, management measures must be conservative and relegated to preventing bird contact with oil-based drilling fluids that may pose a problem.

*Environmental Consequences of the No Action Alternative:* There would be no action authorized that would have potential to influence the reproductive activities or habitat of migratory birds.

*Mitigation:* Pits remaining after the drilling period which store or are expected to store production fluids will be wired or netted to prevent or discourage entry by larger birds attracted to sources of water, including raptors and waterfowl. At a minimum, wire will be stretched over the entire length and breadth of the pit at intervals not exceeding three feet, and made permanently conspicuous either by choice of material or installation of flagging material evenly distributed across the pit at a minimum rate of one flag per 18 square feet.

#### **THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES** (includes a finding on Standard 4)

*Affected Environment:* The project area is broadly encompassed by white-tailed prairie dog (WTPD) habitat. Field visits during February indicate evidence of occupation by prairie dogs at all proposed pad sites (Table 1). Subsurface disturbance along the proposed flowline would affect approximately 61 burrows (single-entrance and mounds, Table 2). All other burrows associated with the flowline would have minimal surface disturbance related to right-of-way clearing. To avoid intersecting large numbers of prairie dog burrows associated with flowline trenches, Chevron, at the former request of BLM, offsets parallel flowlines by 15 or more feet.

Table 1. WTPD habitat (mounds and single entrance burrows) affected by the construction of proposed well pads in Rangely Oil Field.

Well Site	Total acres disturbed	Mounds	Single-entrance
Gray B25X	3.15	0	12
Gray B26X	2.95	7	25
Gray B27X	2.95	2	24
Associated Unit B-2	Private surface	6	21
AC McLaughlin 83X	2.69	6	11
AC McLaughlin 84X	2.70	1	7
AC McLaughlin 85X	2.78	0	0

Well Site	Total acres disturbed	Mounds	Single-entrance
AC McLaughlin 86X	2.80	0	0
AC McLaughlin 87X	2.68	0	8
SB Lacy 13X	2.95	2	36
LN Hagood A 18X	2.73	1	35
<b>Total</b>	<b>28.38</b>	<b>23</b>	<b>172</b>

Table 2. WTPD habitat (mounds and single entrance burrows) affected by the construction of flowlines and access roads associated with proposed well pads in Rangely Oil Field.

Flowline/Access Rd	Total acres disturbed	Mounds	Single-entrance
Gray B25X	2.73	0	1
Access road	.5	0	0
Gray B26X	2.40	0	3
Access road	.36	0	0
Gray B27X	2.82	0	3
Access road	.36	0	0
Associated Unit B-2	Private surface	1	2
AC McLaughlin 83X	.31	0	0
Access road	.17	0	0
AC McLaughlin 84X	2.53	0	15
Access road	.07	0	0
AC McLaughlin 85X	3.17	0	0
AC McLaughlin 86X	2.13	0	3
AC McLaughlin 87X	3.49	0	13
Access road	.07	0	0
SB Lacy 13X	1.66	0	9
LN Hagood A 18X	2.0	0	12
Access road	.07	0	0
<b>Total</b>	<b>24.84</b>	<b>1</b>	<b>61</b>

Prairie dogs and their burrow systems are important components of burrowing owl habitat, as well as potential habitat for reintroduced populations of black-footed ferret. Burrowing owls, a State threatened species are uncommon in this Resource Area. These birds return to occupy a maintained burrow system in early April and begin nesting soon after. Most birds have left the area by September. While burrowing owls have been documented in Rangely Oil Field, no burrowing owl nesting activity has been recorded near the 11 proposed well sites or flowline corridors.

Under the auspices of a non-essential, experimental population rule, black-footed ferrets have been released annually in Coyote Basin (eight miles southwest) and Wolf Creek (13 miles northeast) of Rangely Oil Field since 1999 and 2001, respectively. The rule applies to any ferrets that may occupy or eventually be released in northwest Colorado and northeast Utah. Although there is no direct continuity between Coyote Basin or Wolf Creek and the project site (i.e., lesser physical barriers and habitats unoccupied by prairie dog) there is a strong likelihood that ferrets have colonized and successfully breed in Rangely Oil Field. Ferrets are wholly reliant on prairie dogs for food and shelter. Ferret breeding activities begin in early March, with birthing beginning in early May. Young ferrets generally begin to emerge by mid-July. There have been no verified sightings of ferrets, nor any known reproduction occurring in Rangely Oil Field.

*Environmental Consequences of the Proposed Action:* With regards to burrowing owl, prairie dog and ferret breeding issues, it would be advantageous to schedule earthwork outside the period between 1 April and 15 July. Avoiding this timeframe would provide sufficient time for the rearing, emergence, and dispersal of young from natal burrows and effectively eliminate the likelihood of adversely affecting these animals' reproductive efforts. Due to the limited amount of prairie dog activity at sites AC McLaughlin 84X, 85X, 86X and 87X, and flowlines associated with AC McLaughlin 83X, 85X, 86X and Gray B25X, 26X, construction activities will be permitted to take place between 1 April and 15 July.

Until burrowing owls arrive on these breeding ranges in April, there is no credible means of assessing impacts to nest activity. In the event earthwork associated with this project cannot be completed prior to early April, BLM would conduct nest surveys on the affected flowlines and pads and conditions of approval would be applied to defer activities that may interfere with successful nest outcomes (under provisions of the Migratory Bird Treaty Act).

This project would have no short or long term influence on prairie dog abundance or distribution by itself or as habitat for black-footed ferret or burrowing owl. It is highly unlikely that any subsurface disturbance associated with this proposed action would intersect a prairie dog burrow system occupied by a ferret.

*Environmental Consequences of the No Action Alternative:* There would be no potential influence on prairie dogs as habitat for burrowing owl and black-footed ferret in the case of a no action alternative.

*Mitigation:* With the exception of sites AC McLaughlin 84X, 85X, 86X and 87X, and flowlines associated with AC McLaughlin 83X, 85X, 86X and Gray B25X, 26X, all earthwork will be conducted outside the period of 1 April to 15 July to avoid the remote chance of disrupting the reproductive activities of ferrets, burrowing owl, and prairie dogs. All flowlines and rights-of-way involved in this action will be reclaimed and reseeded with the recommended seed blend listed in the proposed action.

To avoid intersecting large numbers of prairie dog burrows associated with flowline trenches, Chevron will offset those flowlines that parallel existing flowlines by 15 or more feet.

*Finding on the Public Land Health Standard for Threatened & Endangered species:* Public Land Health Standards for those special status species associated with white-tailed prairie dogs, including black-footed ferret and burrowing owl, in the Rangely Oil Field are currently met. As conditioned, this project would have no adverse influence on populations, available extent of suitable habitat, or the reproductive activities of these three species. Thus, there would be no influence on meeting the land health standard. Small incremental gains in perennial grass cover associated with successful reclamation and subsurface tillage associated with flowline installation may be expected to bolster local populations of prairie dogs and potentially benefit individual burrowing owl and black-footed ferret—effects consistent with continued meeting of the Land Health Standards.

## **WASTES, HAZARDOUS OR SOLID**

*Affected Environment:* There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

*Environmental Consequences of the Proposed Action:* No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

*Environmental Consequences of the No Action Alternative:* No hazardous or other solid wastes would be generated under the no-action alternative.

*Mitigation:* The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

## **WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)**

*Affected Environment:* Surface Water: The proposed actions are located in the Stinking Water Creek catchment area which is a tributary to the White River. A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. The State has classified stream segment 22 of the White River Basin as "Use Protected" and further designated as beneficial for the following uses: Warm Aquatic Life 2, Recreation 1b, and Agriculture. The antidegradation review requirements in the Antidegradation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For this reach, minimum standards for four parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 325/100 ml, and 205/100 ml E. coli.

Ground Water: During the drilling process it is likely that deep ground water aquifers be encountered. Local ground water may also be affected if contaminants are allowed to infiltrate the soils.

*Environmental Consequences of the Proposed Action:* Construction of access roads and well pads will result in temporary exposure of soils to erosional processes. Removal of ground cover would likely increase erosive potential due to runoff and raindrop impact during storm events. Increased traffic on access roads may lead to rut development causing water to be channelized down the roadway. As a result, erosive head cutting will develop at locations water exits the roadway.

Local ground water may be contaminated if a spill results or pit contents are allowed to infiltrate soils. Adverse impacts on deeper ground water are also possible as a result of cross aquifer contamination due to drilling.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* To mitigate surface erosion due to removal of ground cover at the well pad, it is recommended stockpiled soils be covered and silt fences be used on down gradient sides. It is also recommended that upon reclamation flow deflectors and sediment traps (woody debris) be redistributed over the area along with seed. Also, in constructing access roads, proper drainage structures (drain dips, culverts) must be installed to reduce further surface erosion.

To minimize consequences to ground water resources all pits should be lined. In addition, all wastes associated with construction and drilling will be properly treated and disposed of. Finally, aquifers beneficial for human consumption and livestock encountered during the drilling process must be properly sealed off to reduce potential for contamination.

*Finding on the Public Land Health Standard for water quality:* Stinking Water Creek currently meets water quality standards set by the state of Colorado for stream segment 22 of the White River Basin. Following proper mitigation techniques, water quality should not be significantly compromised.

## **WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)**

*Affected Environment:* There are not any wetlands or riparian habitats conceivably affected by this action. The White River, representing the nearest aquatic habitat, is separated from the project area by about eight miles of ephemeral channel.

*Environmental Consequences of the Proposed Action:* None

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* None

*Finding on the Public Land Health Standard for riparian systems:* This project would have no conceivable influence on wetland or riparian conditions addressed in the Standards.

## **CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:**

No ACEC's, flood plains, prime and unique farmlands, Wilderness, or Wild and Scenic Rivers, threatened, endangered or sensitive plants exist within the area affected by the proposed action. For threatened, endangered and sensitive plant species Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants. There are also no

Native American religious or environmental justice concerns associated with the proposed action.

### **NON-CRITICAL ELEMENTS**

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

## SOILS (includes a finding on Standard 1)

*Affected Environment:* The following data is a product of an order III soil survey conducted by the NRCS. The accompanying table highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office.

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
7	Billings silty clay loam	0-5%	Alkaline Slopes	2-8	Rapid	Moderate to high	>60
16	Chipeta silty clay loam	3-25%	Clayey Salt desert	4-16	Rapid	High	10-20
17	Chipeta silty clay loam eroded	3-25%	Clayey Salt desert	4-16	Rapid	Very high	10-20

**Billings silty clay loam** (0 to 5 percent slopes) is a deep, well drained soil often found on alluvial valley floors, flood plains, narrow valley floors, and terraces. It formed in calcareous, silty alluvium derived dominantly from shale. The native vegetation is mainly desert shrubs and grasses. Typically, the upper part of the surface layer is light gray silty clay loam about 2 inches thick. The lower part is pale brown silty clay loam about 4 inches thick. The underlying material to a depth of 60 inches or more is silty clay loam that has a few fine gypsum crystals. Permeability of this Billings soil is slow. Available water capacity is high. Effective rooting depth is 60 inches or more. Runoff is rapid, and the hazard of water erosion is moderate to high.

**Chipeta silty clay loam** (3 to 25 percent slopes) is a shallow, well drained soil primarily found on low, rolling hills and on toe slopes. It formed in residuum derived from calcareous, gypsiferous shale. Areas are rounded to irregular in shape and are 20 to 800 acres in size. The native vegetation is mainly salt-tolerant shrubs and grasses. Typically, the surface layer is light brownish gray silty clay loam about 3 inches thick. The next layer is light olive gray silty clay about 6 inches thick. The underlying material is light olive gray silty clay that has fine shale chips and seams of crystalline gypsum and is about 9 inches thick. Shale is at a depth of 18 inches. Depth to shale ranges from 10 to 20 inches. Permeability of this Chipeta soil is slow. Available water capacity is low. Effective rooting depth is 10 to 20 inches. Runoff is rapid, and the hazard of water erosion is high.

**Chipeta silty clay loam** (3 to 25 percent slopes) is a shallow, well drained soil found on low, rolling hills and on toe slopes. It formed in residuum derived from calcareous, gypsiferous shale. Areas are irregular in shape and are 20 to 1,000 acres in size. The native vegetation is mainly sparse stands of salt-tolerant desert shrubs and grasses. Typically, the surface layer is light brownish gray silty clay loam 2 inches thick. The underlying material is light brownish gray silty clay that has fine chips of shale and seams of crystalline gypsum and is about 10 inches thick. Shale is at a depth of 12 inches. Depth to shale ranges from 10 to 20 inches. Permeability of this eroded Chipeta soil is slow. Available water capacity is very low. Effective rooting depth is 7 to 20 inches. Runoff is rapid, and the hazard of water erosion is very high.

*Environmental Consequences of the Proposed Action:* The majority of the soils encountered contains gypsum crystals and are high in salinity. Gypsum crystals dissolve easily

when in contact with ponded water and can cause soil piping. This piping leads to gully erosion, which if left unattended can cause some problems. Removal of limited ground cover will also expose soils to erosional processes. Heavy traffic will increase soil compaction decreasing infiltration rates which in turn will increase potential for erosive overland flows. Revegetation efforts may be hindered by soil salinity and draughty conditions.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* The use of salt tolerant plant species (refer to plant species listed in the vegetation section) is recommended in revegetation efforts to improve success of reclamation procedures.

The operator will be responsible for monitoring for salts leaching from soils. If large salt deposits begin to appear, the operator will notify BLM, together they will coordinate the application of best management practices to help mitigate the problem.

Comply with “Gold Book” surface operating standards for constructing roads and access ways. Use dust abatement practices as stated in the air quality section to reduce soil erosion due to eolian processes.

*Finding on the Public Land Health Standard for upland soils:* Infiltration rates will be reduced with increased soil compaction. Following proper mitigation techniques and reclamation procedures, soil health will not be greatly compromised.

## **VEGETATION** (includes a finding on Standard 3)

*Affected Environment:* The proposed action is located within Alkaline Slope and Clayey Saltdesert ecological sites, which are dominated by salt tolerant vegetation. The dominate plant community for these sites consist of greasewood (*Sarcobatus vermiculatus*) and various saltbushes such as shadscale (*Atriplex confertifolia*), Gardner saltbrush (*Atriplex gardneri*), mat saltbush (*Atriplex corrugate*), and fourwing saltbrush (*Atriplex canescens*). Other brushes intermixed in the area are rabbitbrush (*Chrysothamnus viscidiflorus*) and big sagebrush (*Artemisia tridentata*). The understory of these shrubs is dominated by western wheatgrass (*Agropyron smithii*), Colorado wildrye (*Elymus salinus*), and squirreltail (*Sitanion hystrix*). Cheatgrass (*Bromus tectorum*) is an undesirable, invasive, and alien plant species that is present within the locality of the proposed action.

The soils within the project area are principally a Billings Silty Clay Loam (Alkaline Slope ecological site) and Chipeta Silty Clay Loam (Clayey Saltdesert ecological site). These soil types have a high clay content that is moderate to highly erosive and receives low precipitation with rapid runoff, thus limiting forage production and hampering re-vegetation efforts.

Drought conditions are very prevalent within the Coal Oil Basin area, which has hampered the successful establishment of reclaimed plant species of other projects in this area. Therefore, undesirable and invasive annual plant species (i.e. halogeton (*Halogeton glomeratus*),

cheatgrass) have become dominant in portions of previously disturbed areas which provide little resource value and hinder efforts to meet Public Land Health Standards.

*Environmental Consequences of the Proposed Action:* The proposed action would disturb a mid to low seral class of desert shrub community for a total of 53.35 acres. These 53.35 acres of disturbance can be broken down into long-term and short-term disturbances. Long-term disturbances include 28.41 acres associated with well pads and 1.6 disturbed acres from road construction/upgrades, thus a total of 30.01 acres of long-term disturbance. The remaining 23.34 acres are short-term disturbances associated with pipelines.

Short-term soil and vegetation disturbances (23.34 acres) would be offset in the long-term by successfully reclaiming the disturbed area with a seed mix that is suited for this ecological site. As this area has a component of cheatgrass and halogeton within the plant community, successful re-vegetation efforts would slightly increase desirable plant species within the rangelands. The short-term disturbance offsets occur mostly on pipelines, however the pads and roads are a long-term disturbance that create a loss vegetative cover on the landscape.

Previously this area has entailed considerable impacts from oil and gas activities from a network of well pads, pipeline corridors, and access roads, which have resulted in a fragmentation and reduction of available/productive ecological sites.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* Promptly revegetate all disturbed areas associated with the proposed action, including all cut and fill slopes and topsoil stockpiles, with Standard Seed Mix #1 of the White River Resource Area Resource Management Plan (RMP) (B-19, Appendix B). Seeding rates in the White River ROD/RMP are shown as pounds of Pure Live Seed (PLS) per acre and apply to drill seeding. For broadcast application, double the seeding rate and then harrow to insure seed coverage. Applied seed must be certified and free of noxious weeds and seed certification tags must be submitted to the Field Manager within 30 days of seeding. The applicant will be responsible for eradicating cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the proposed action. The applicant will use materials and methods as outlined in the White River ROD/RMP or authorized in advance by the White River Field Office manager.

*Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial):* The proposed action would disturb a small segment of the Alkaline Slope and Clayey Salt-desert ecological sites. Therefore, the action would further fragment these areas to a minimal degree.

Early seral ecological sites associated with the proposed action lacks desirable plant species at an appreciable density and frequency level, thus are not meeting standards. This is due to the prevalence of cheatgrass and halogeton within the vegetative understory. A slight positive benefit would be received through a successful re-vegetation effort, thus increasing preferred plant species within this low producing rangeland. Mid seral ecological sites at the proposed

action locality have acceptable components within the plant community and are meeting standards.

### **WILDLIFE, AQUATIC** (includes a finding on Standard 3)

*Affected Environment:* There are no aquatic habitats conceivably affected by this action. The White River, representing the nearest aquatic habitat, is separated from the project area by about eight miles of ephemeral channel.

*Environmental Consequences of the Proposed Action:* None

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* None

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Terrestrial): This project would have no conceivable influence on aquatic wildlife or habitat conditions addressed in the Standards.

### **WILDLIFE, TERRESTRIAL** (includes a finding on Standard 3)

*Affected Environment:* This heavily developed portion of Coal Oil Basin is inhabited year-round by a small resident herd of pronghorn. These animals are acclimated to routine oil and gas production activities. A number of raptors forage opportunistically during the winter in Coal Oil Basin, the most common being rough-legged hawks, red-tailed hawks, and golden eagle. The project area and the surrounding area provide no special or unique habitat features for nesting raptors.

*Environmental Consequences of the Proposed Action:* This project, as mitigated, would have no conceivable adverse consequences on big game distribution or habitat quality. Right-of-way reclamation normally provides herbaceous forage opportunity in excess of that previously existing and in many cases will replace cheatgrass and halogeton-dominated understories almost immediately after construction is complete. Standard reclamation procedures would provide the opportunity to increase the perennial grass component on these corridors in the longer term, increasing ground cover and seed production and prolonging the availability of green herbaceous forage for resident big and non-game animals. While surface disturbance would cause a longer-term reduction in woody forage supply, the incremental shrub reductions are wholly insignificant with respect to the available forage base.

*Environmental Consequences of the No Action Alternative:* There would be no potential influence on big game distribution or habitat quality in the case of a no action alternative.

*Mitigation:* See mitigation for T&E Species section above.

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Aquatic): Much of the ground cover within the Rangely Field is dominated by annual weeds. Although these sites in and of themselves cannot be considered meeting the definition of the land health standard, the majority of the shrubland communities comprising this landscape likely retain sufficient character to support viable populations of resident wildlife, although likely at populations reduced from potential. Subsequent reclamation offers an opportunity to reestablish herbaceous forage and cover conditions (i.e., redevelopment of a perennial bunchgrass component) more consistent with the proper functioning of these arid salt desert communities as wildlife habitat, thus better opportunity to meet the land health standard.

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation		X	
Cadastral Survey	X		
Fire Management	X		
Forest Management	X		
Geology and Minerals			X
Hydrology/Water Rights	X		
Law Enforcement		X	
Noise		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations	X		
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

## GEOLOGY AND MINERALS

*Affected Environment:* The surface geologic formation of the wells is Mancos and Chevron's targeted zone is in the Weber. During drilling potential water, oil and gas zones will be encountered from surface to the targeted zone. The Weber is known to have H<sub>2</sub>S. All of the wells are located in the northwestern corner of the Rangely Field and are part of the Weber Sand Unit which has been in effect since 1957.

*Environmental Consequences of the Proposed Action:* The cementing procedure of the proposed actions isolates the formations and will prevent the migration of gas, water, and oil

between formations. Development of these wells will deplete the hydrocarbon resources in the targeted formation.

*Environmental Consequences of the No Action Alternative:* Maximum economic recovery of the oil and gas resources in the targeted zones would not occur.

*Mitigation:* None

## **PALEONTOLOGY**

*Affected Environment:* All eleven well pads, well tie pipelines and access roads are in an area mapped as the Mancos Shale (Tweto 1979) which the BLM has classified as a Condition II formation, meaning it only rarely is known to produce scientifically important fossil resources.

*Environmental Consequences of the Proposed Action:* For all wells, well tie pipelines and access roads: if it becomes necessary to excavate into the underlying bedrock formation to level the pad, excavate the reserve/blooiie pit or bury the well tie pipeline there is a small chance to impact scientifically important fossil resources.

*Environmental Consequences of the No Action Alternative:* There would be no new impacts to fossil resources under the No Action Alternative.

*Mitigation:* For all well pads, reserve/blooiie pits and well tie pipelines: If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

## **RANGELAND MANAGEMENT**

*Affected Environment:* The proposed action is located in the Artesia allotment (06308), which is authorized for sheep use by Morapos Sheep Company. Grazing use by sheep in the allotment can be authorized from December 1<sup>st</sup> through April 20<sup>th</sup>.

Soils within the project area are principally a Billings Silty Clay Loam (Alkaline Slope ecological site) and Chipeta Silty Clay Loam (Clayey Salt-desert ecological site), which are dominated by a salt tolerant desert shrub and grass community. These brush/grass communities are utilized by sheep for meeting forage requirements, particularly during winter months. These soil types have a high clay content that are moderate to highly erosive and receives low precipitation with rapid runoff, thus limiting forage production and hampering re-vegetation efforts.

Drought conditions are very prevalent within the Coal Oil Basin area, which has hampered the successful establishment of reclaimed plant species of other projects in this area. Therefore,

undesirable and invasive annual plant species (i.e. halogeton, cheatgrass) have become dominate in a portion of these disturbed areas which provide little forage value for livestock.

*Environmental Consequences of the Proposed Action:* The individual proposed action would have minimal impacts on the authorized grazing use because the amount of new surface disturbance (53.35 acres) is nominal in regards to the scale of the allotment (43,347 total acres).

The 53.35 acres of disturbance can be broken down into long-term and short-term disturbances. Long-term disturbances include 28.41 acres associated with well pads and 1.6 disturbed acres from road construction/upgrades, thus a total of 30.01 acres of long-term disturbance. The remaining 23.34 acres are short-term disturbances associated with pipelines. Long-term forage losses associated with the individual proposed action are estimated at 3 Animal Unit Months (AUMs). However, previously this allotment has entailed considerable impacts from oil and gas activities, which have resulted in a reduction and fragmentation of available rangelands and in a loss of forage for grazing use.

Short-term soil and vegetation disturbances (23.34 acres) would be offset in the long-term by successfully reclaiming the disturbed area with a seed mix that is suited for this ecological site. These short-term disturbance offsets occur on pipelines; however the pads and roads are a long-term disturbance that creates a loss of forage availability. As this area has a component of cheatgrass and halogeton within the plant community, successful re-vegetation efforts would slightly increase desirable forage species within the rangelands.

If the proposed action was authorized during the grazing period, it would have some limited impacts while sheep are grazing. This is in part due to the increased activity associated with the development of the proposed action and decrease in rangelands available for grazing. Also, BLM grazing permit holders have experienced injury and losses of livestock due to inadequate fencing of disposal pits at the pads. Other impacts to livestock grazing may include such influences as a modification in sheep distribution, reduction in available forage, injury to livestock, and impediments to livestock grazing and movement.

Overall, this individual proposed action would have no significant direct impact on the authorized AUMs in the allotments. A slight positive benefit would be received through successful re-vegetation efforts on pipelines, thus increasing preferred forage plants within this mid to low producing rangeland. However, the cumulative impacts from past, present, and possible future oil and gas activities may have a long-term effect on the native range's carrying capacity, thus influencing the authorized AUMs. This possible affect would be determined during the grazing permit renewal process which includes an evaluation of forage capacity available for livestock. It is foreseeable that the grazing permit holder could loose a portion of permitted active AUMs due to a loss of forage associated with oil and gas development within the authorized BLM grazing allotment.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* Any livestock control facilities and/or rangeland improvements impacted during this operation will be replaced or repaired to their prior condition. The applicant will

install a cattleguard to BLM specifications in any fences which they encounter. Also, the applicant will be held responsible for maintenance of livestock control facilities, such as cattleguards, in a proper functioning condition which they encounter or affect during operation.

## RECREATION

*Affected Environment:* The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The project area has been delineated/most resembles a Recreation Opportunity Spectrum (ROS) class of Modified Urban (MU). MU physical and social recreation setting is culturally modified to the point that it is dominant to the sensitive travel route observer. This may include pastoral, agricultural, intensively managed wildland resource landscapes, or utility corridors. Pedestrian or other slow moving observers are constantly within view of culturally changed landscape. There is strong evidence of designed roads and/or highways. Structures are readily apparent and may range from scattered to small dominant clusters including utility corridors, farm buildings, microwave installations, and recreation sites. Frequency of contact is high at developed sites and on roads and trails; moderate away from developed sites.

Modified Urban recreation experience is characterized by a low probability of isolation from the sights and sounds of humans.

*Environmental Consequences of the Proposed Action:* The public will lose approximately 54 acres of dispersed recreation potential while wells are in operation.

*Environmental Consequences of the No Action Alternative:* No loss of dispersed recreation potential and no impact to hunting recreationists.

*Mitigation:* None.

## VISUAL RESOURCES

*Affected Environment:* The proposed action is located within a VRM class IV area. The objective of this class is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

*Environmental Consequences of the Proposed Action:* The proposed action would be located in an area with a high density of existing well pads. The additional well pads of the proposed action would not dominate the view of the casual observer and the level of change to

the characteristic landscape would be moderate. By painting all production facilities the color as stated in the APD, the standards of the VRM IV classification would be retained.

*Environmental Consequences of the No Action Alternative:* There would be no additional impacts.

*Mitigation:* None

**CUMULATIVE IMPACTS SUMMARY:** Cumulative impacts from oil and gas development were analyzed in the White River Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) completed in June 1996. Current development, including the proposed action, has not exceeded the cumulative impacts from the foreseeable development analyzed in the PRMP/FEIS.

#### **REFERENCES CITED:**

Baker, Steven G.

- 1986 Initial Archaeological Monitoring and Emergency Mitigation Procedures at Chevron U.S.A.'s Rangely Field CO<sub>2</sub> Injection Project, Rio Blanco County, Colorado, 1985. Centuries Research, Inc., Montrose, Colorado.

Larralde, Signa L.

- 1981 Cultural Resource Inventory of a Sample of BLM Lands in the Rangely Oil Field, Rio Blanco County, Northwestern Colorado. Nickens and Associates, Montrose, Colorado.

Nelson, Mark W.

- 1986 Report of Examination for Cultural Resources: Moon Lake Electric Association, Inc.'s 69 kV Transmission Line, Proposed, Rangely Oil Field, Chevron Water Plant #3. White River Resource Area, Bureau of Land Management, Meeker, Colorado.

Tweto, Ogden

- 1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

**PERSONS / AGENCIES CONSULTED:** None

**INTERDISCIPLINARY REVIEW:**

<b>Name</b>	<b>Title</b>	<b>Area of Responsibility</b>
Nate Dieterich	Hydrologist	Air Quality
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Michael Selle	Archaeologist	Cultural Resources Paleontological Resources
Jed Carling	Rangeland Specialist	Invasive, Non-Native Species
Lisa Belmonte	Wildlife Biologist	Migratory Birds
Lisa Belmonte	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid
Nate Dieterich	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Lisa Belmonte	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Nate Dieterich	Hydrologist	Soils
Jed Carling	Rangeland Specialist	Vegetation
Lisa Belmonte	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Jed Carling	Rangeland Specialist	Rangeland Management
Linda Jones	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Keith Whitaker	Natural Resource Specialist	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses

# **Finding of No Significant Impact/Decision Record (FONSI/DR)**

**CO-110-2005-099-EA**

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE:** The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

**DECISION/RATIONALE:** It is my decision to approve development of the wells and flowlines as described in the proposed action, with the addition of the mitigation measures listed below. This development, with mitigation, is consistent with the decisions in the White River ROD/RMP, and environmental impacts will be minimal.

**MITIGATION MEASURES:** 1. During dry periods/heavy use times dust abatement practices such as spreading water on roadways will be necessary.

2. For all wells and well tie pipelines: The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places
- The mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- A timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

3. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you

must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

4. The applicant will be responsible for eradicating cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the proposed action. The applicant will use materials and methods as outlined in the White River ROD/RMP and/or authorized in advance by the White River Field Office manager. Application of herbicides must be under field supervision of an Environmental Protection Agency (EPA) certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

5. With the exception of sites AC McLaughlin 84X, 85X, 86X and 87X, and flowlines associated with AC McLaughlin 83X, 85X, 86X and Gray B25X, 26X, all earthwork will be conducted outside the period of 1 April to 15 July to avoid the remote chance of disrupting the reproductive activities of ferrets, burrowing owl, and prairie dogs. All flowlines and rights-of-way involved in this action will be reclaimed and reseeded with the recommended seed blend listed in the proposed action.

6. To avoid intersecting large numbers of prairie dog burrows associated with flowline trenches, Chevron will offset those flowlines that parallel existing flowlines by 15 or more feet.

7. The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

8. To mitigate surface erosion due to removal of ground cover at the well pad, it is recommended stockpiled soils be covered and silt fences be used on down gradient sides. It is also recommended that upon reclamation flow deflectors and sediment traps (woody debris) be redistributed over the area along with seed. Also, in constructing access roads, proper drainage structures (drain dips, culverts) must be installed to reduce further surface erosion.

9. To minimize consequences to ground water resources all pits should be lined. In addition, all wastes associated with construction and drilling will be properly treated and disposed of. Finally, aquifers beneficial for human consumption and livestock encountered during the drilling process must be properly sealed off to reduce potential for contamination.

10. The use of salt tolerant plant species is recommended in revegetation efforts to improve success of reclamation procedures.

- shadscale (*Atriplex confertifolia*)
- Gardner saltbrush (*Atriplex gardneri*)
- mat saltbush (*Atriplex corrugate*)
- fourwing saltbrush (*Atriplex canescens*)

Other brushes intermixed in the area are rabbitbrush (*Chrysothamnus viscidiflorus*) and big sagebrush (*Artemisia tridentata*). The understory of these shrubs is dominated by western wheatgrass (*Agropyron smithii*), Colorado wildrye (*Elymus salinus*), and squirreltail (*Sitanion hystrix*).

11. The operator will be responsible for monitoring for salts leaching from soils. If large salt deposits begin to appear, the operator will notify BLM, together they will coordinate the application of best management practices to help mitigate the problem.

12. Comply with “Gold Book” surface operating standards for constructing roads and access ways. Use dust abatement practices as stated in the air quality section to reduce soil erosion due to eolian processes.

13. Promptly revegetate all disturbed areas associated with the proposed action, including all cut and fill slopes and topsoil stockpiles, with Standard Seed Mix #1 of the White River ROD/RMP Appendix B, Table B-1, listed in the proposed action. Seeding rates in the White River ROD/RMP are shown as pounds of Pure Live Seed (PLS) per acre and apply to drill seeding. For broadcast application, double the seeding rate and then harrow to insure seed coverage. Applied seed must be certified and free of noxious weeds and seed certification tags must be submitted to the Field Manager within 30 days of seeding. The applicant will be responsible for eradicating cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the proposed action. The applicant will use materials and methods as outlined in the RMP or authorized in advance by the White River Field Office manager.

14. For all well pads, reserve/blooi pits and well tie pipelines: If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

15. Any livestock control facilities and/or rangeland improvements impacted during this operation will be replaced or repaired to their prior condition. The applicant will install a cattleguard to BLM specifications in any fences which they encounter. Also, the applicant will be held responsible for maintenance of livestock control facilities, such as cattleguards, in a proper functioning condition which they encounter or affect during operation.

16. Pits remaining after the drilling period which store or are expected to store production fluids will be wired or netted to prevent or discourage entry by larger birds attracted to sources of water, including raptors and waterfowl. At a minimum, wire will be stretched over the entire length and breadth of the pit at intervals not exceeding three feet, and made permanently conspicuous either by choice of material or installation of flagging material evenly distributed across the pit at a minimum rate of one flag per 18 square feet.

**NAME OF PREPARER:** Tamara Meagley 5-20-05

**NAME OF ENVIRONMENTAL COORDINATOR:** Caroline Hollowed

**SIGNATURE OF AUTHORIZED OFFICIAL:** *Hunt E. Walter*  
Field Manager

**DATE SIGNED:** *6/02/05*

**ATTACHMENTS:** 1. Location map of the proposed action. 2. Map of proposed project.

# Location of Proposed Action CO-110-2005-099-EA

